#### BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellant: Ismail K. Labeeb

Serial Number: 09/893,192 Atty. Docket: MNI010001

Filing Date: June 27, 2001

For: METHOD AND APPARATUS FOR DELIVERY OF TELEVISION

PROGRAMS AND TARGETED DE-COUPLED ADVERTISING

Art Unit: 2421

**Examiner:** Omar S. Parra

# **APPEAL BRIEF**

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

In response to the final Office Action dated June 23, 2010, and further to the Notice of Appeal filed on November 22, 2010, Appellant hereby submits an Appeal Brief in accordance with 37 C.F.R. §41.37 for the above-referenced application. The due date for this Appeal Brief is January 24, 2011 (because January 22, 2011 is a Saturday).

### I. Real Party in Interest

The real party in interest is THOMSON Licensing S.A., 46 Quai A. Le Gallo, F-92100 Boulogne-Billancourt, France.

### **II. Related Appeals and Interferences**

There are no prior or pending appeals, interferences, or judicial proceedings known to Appellant, the Appellant's legal representative, or assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

#### **III. Status of Claims**

Claims 1-20, 22-23 and 26-29 are pending in this application, and are rejected. Claims 21 and 24-25 are cancelled. The rejection of claims 1-20, 22-23 and 26-29 is being appealed.

### **IV. Status of Amendments**

No amendment subsequent to the final rejection of June 23, 2010 has been filed.

#### V. Summary of Claimed Subject Matter

Independent claim 1 defines a method for displaying a TV program to a viewer (see, for example, page 1, lines 13-14), comprising:

receiving a plurality of TV programs, wherein at least some of the received TV programs compete with at least some others of the received TV programs for viewership (see, for example, page 1, lines 14-15);

allowing the viewer to select one of the plurality of received TV programs for viewing (see, for example, page 1, lines 15-16);

storing data indicative of the viewer selected TV program and data indicative of at least some others of the TV programs competing with the viewer selected TV program that were not selected (see, for example, page 12, lines 5-18);

determining viewing preferences using the stored data indicative of the user selected TV program and data indicative of at least some others of the TV programs competing with the viewer selected TV program that were not selected as well as one or

more known program traits and one or more associated program traits, the associated program traits being combined with other known program traits so as to generate new program traits representative of said viewer's degree of preference of a program according to a regression analysis of the viewing habits of the particular viewer over time (see, for example, page 13, line 19 to page 18, line 31); and

controlling the programming displayed to the viewer in accordance with the viewer selection and the determined viewing preferences (see, for example, page 1, lines 17-20).

Independent claim 14 defines a method for displaying a TV program to a viewer (see, for example, page 2, lines 6-7), comprising:

transmitting a plurality of TV programs for selection therebetween by the viewer, wherein at least some of the TV programs compete with at least some others of the TV programs for viewership (see, for example, page 2, lines 8-9);

transmitting a plurality of additional programs (see, for example, page 2, lines 9-10);

storing data indicative of viewer selected ones of the TV programs and at least some others of the TV programs competing with the viewer selected TV programs that were not selected (see, for example, page 12, lines 5-18);

determining viewing preferences using the stored data indicative of the user selected TV program and stored data indicative of at least some others of the TV programs competing with the viewer selected TV programs that were not selected as well as one or more known program traits and one or more associated program traits; the associated program traits being combined with other known program traits so as to generate new program traits representative of said viewer's degree of preference of a program according to a regression analysis of the viewing habits of the particular viewer over time (see, for example, page 13, line 19 to page 18, line 31);

selecting ones of the additional programs in accordance with the determined viewing preferences for display to the viewer with the selected TV programs (see, for example, page 2, lines 10-13).

Dependent claim 26 further defines the method of claim 1 and states: wherein performing said regression analysis results in the introduction of one or more additional traits used to improve the determination of the viewer's preference when an average error value between the selected program and one or predicted programs determined in the regression process does not converge to a given value (see, for example, page 16, line 16 to page 18, line 31).

Independent claim 28 defines a method for displaying a TV program to a plurality of viewers (see, for example, page 1, lines 13-14), comprising:

receiving a plurality of TV programs, wherein at least some of the received TV programs compete with at least some others of the received TV programs for viewership (see, for example, page 1, lines 14-15);

allowing a viewer to select one of the plurality of received TV programs for viewing (see, for example, page 1, lines 15-16);

identifying whether a viewer profile has been created for said viewer (see, for example, page 12, lines 5-18);

creating said viewer profile if said viewer profile has not been created for said viewer (see, for example, page 12, lines 5-18);

storing in said viewer profile data indicative of said viewer selected TV program and data indicative of at least some others of the TV programs competing with the viewer selected TV program that were not selected (see, for example, page 12, lines 5-18);

determining viewing preferences from said viewer profile using the stored data indicative of said viewer selected TV program and data indicative of at least some others of the TV programs competing with the first viewer selected TV program that were not selected as well as one or more known program traits and one or more associated program traits; the associated program traits being combined with other known program traits so as to generate new program traits representative of said viewer's degree of preference of a program according to a regression analysis of the viewing habits of the particular viewer over time (see, for example, page 13, line 19 to page 18, line 31);

controlling the programming displayed to said viewer in accordance with the viewer selection and the determined viewing preferences (see, for example, page 1, lines 17-20).

### VI. Grounds of Rejection to be Reviewed on Appeal

The following grounds of rejection are presented for review in this appeal:

- A. The rejection of claims 1-20, 22-23 and 26-27 under 35 U.S.C. §103(a) based on the proposed combination of U.S. Patent No. 6,698,020 issued to Zigmond et al. (hereinafter, "Zigmond"), U.S. Patent No. 7,051,352 issued to Schaffer (hereinafter, "Schaffer"), and U.S. Patent Publication No. 2002/0199194 by Ali (hereinafter, "Ali"); and
- B. The rejection of claims 28-29 under 35 U.S.C. §103(a) based on the proposed combination of Zigmond, Schaffer, Ali and U.S. Patent Publication No. 2003/0088872 by Maissel et al. (hereinafter, "Maissel").

### VII. Argument

## A. Patentability of Claims 1-20, 22-23 and 26-27

The rejection of claims 1-20, 22-23 and 26-27 under 35 U.S.C. §103(a) based on the proposed combination of Zigmond, Schaffer and Ali should be reversed for at least the following reasons.

Appellant first notes that independent claim 1 recites:

"A method for displaying a TV program to a viewer, comprising: receiving a plurality of TV programs, wherein at least some of the received TV programs compete with at least some others of the received TV programs for viewership;

allowing the viewer to select one of the plurality of received TV programs for viewing;

storing data indicative of the viewer selected TV program and data indicative of at least some others of the TV programs competing with the viewer selected TV program that were not selected;

determining viewing preferences using the stored data indicative of the user selected TV program and data indicative of at least some others of the TV programs competing with the viewer selected TV program that were not selected as well as one or more known program traits and one or more associated program traits, the associated program traits being combined with other known program traits so as to generate new program traits representative of said viewer's degree of preference of a program according to a regression analysis of the viewing habits of the particular viewer over time; and

controlling the programming displayed to the viewer in accordance with the viewer selection and the determined viewing preferences." (emphasis added)

As indicated above, independent claim 1 recites a method for displaying a TV program to a viewer. According to the claimed method, viewing preferences are determined using stored data as well as one or more known program traits and one or more associated program traits. Notably, the associated program traits are combined with other known program traits so as to generate new program traits representative of the viewer's degree of preference of a program according to a regression analysis of the viewing habits of the particular viewer over time. Independent claim 14 recites subject matter similar to claim 1, including the aforementioned underlined features.

None of the cited references, whether taken individually or in combination, discloses or suggests each and every feature recited by independent claims 1 and 14.

On page 6 of the final Office Action of June 23, 2010, the Examiner admits that Zigmond and Schaffer both fail to disclose, *inter alia*, the aforementioned underlined features of independent claims 1 and 14. In an attempt to remedy these admitted deficiencies of Zigmond and Schaffer, the Examiner relies on Ali.

In response, Appellant submits that Ali is unable to remedy the aforementioned admitted deficiencies of Zigmond and Schaffer. In particular, Ali discloses a system and method for making program recommendations to users of a network-based video recording system that includes calculating correlation factors by measuring the correlation of many users' ratings of programs (see, for example, the Abstract). However, Ali clearly fails to disclose or suggest, *inter alia*, the features of generating "new program traits representative of said viewer's degree of preference of a program according to a regression analysis of the viewing habits of the particular viewer over

<u>time</u>" (emphasis added), as claimed. In fact, a text search indicates that the term "regression analysis" appears nowhere within Ali (or either of the other two cited references, Zigmond and Schaffer).

Moreover, a detailed reading of Appellant's specification shows associated program traits include traits that provide greater predictive accuracy of a user's viewing habits than simply the combination of the individual traits. Associated program traits cannot be calculated by observing the input of other users in the way that the correlation factors of Ali are calculated.

In contrast to the correlation factors of Ali, an associated trait representing a certain user's liking of a specific show has to be refined with the claimed invention by regression analysis of that specific user's habits, rather than simply observing the correlation of traits in the viewing habits of many users (as taught by Ali). As explained on page 15, lines 14-28 of Appellant's specification, if only the liking for the individual traits of the user are considered, a user's preference for a specific show on a specific channel, or any other anomalous liking trait specific to that user for that matter, would be unexplainable. The disclosure of Ali fails to address this problem and fails to disclose or suggest the improved method of the claimed invention.

Accordingly, Ali fails to remedy the aforementioned admitted deficiencies of Zigmond and Schaffer. As such, even if the three cited references are combined, as proposed, the resulting combination still does not disclose or suggest each and every feature recited by independent claims 1 and 14. Therefore, independent claims 1 and 14, and their respective dependent claims, are patentable under 35 U.S.C. §103(a) over the proposed combination of Zigmond, Schaffer and Ali.

Appellant further submits that dependent claim 26 is independently patentable under 35 U.S.C. §103(a) over the proposed combination of Zigmond, Schaffer and Ali. Specifically, dependent claim 26 further defines independent claim 1 by stating that the "regression analysis results in the introduction of one or more additional traits used to improve the determination of the viewer's preference when an average error value

between the selected program and one or predicted programs determined in the regression process does not converge to a given value." (emphasis added)

In contradistinction to claim 26, Ali discloses a system that keeps a tally of how often a feature of an item occurs in a population of related items, and the rating given to the item by the user (see paragraphs [0076]-[0088]). The disclosure of Ali, however, only discloses using a method for inferring feature ratings based on <u>predefined</u> attributes (see, for example, paragraphs [0082] and [0088]).

In contrast to the proposed combination including the teachings of Ali, the regression analysis disclosed in the present invention beneficially introduces <u>additional</u> <u>associated traits</u>, to improve the determination of a viewer's preferences if the error <u>identified in the regression process does not converge to zero or some other acceptable value</u>. The proposed combination of references clearly fails to disclose or suggest, *inter alia*, the beneficial regression process recited in claims 1, 14 and 26.

Accordingly, for at least the foregoing reasons, Appellant respectfully requests that the Board reverse the rejection of claims 1-20, 22-23 and 26-27 under 35 U.S.C. §103(a).

### B. Patentability of Claims 28-29

The rejection of claims 28-29 under 35 U.S.C. §103(a) based on the proposed combination of Zigmond, Schaffer, Ali and Maissel should be reversed for at least the following reasons.

Independent claim 28 defines features similar to independent claims 1 and 14 discussed above. Maissel is unable to remedy each of the deficiencies of Zigmond, Schaffer and Ali pointed out above in connection with independent claims 1 and 14. For example, Maissel also clearly fails to disclose or suggest, *inter alia*, the features of generating "new program traits representative of said viewer's degree of preference of a program according to a regression analysis of the viewing habits of the particular viewer over time" (emphasis added), as provided by independent claim 28, and its dependent

claim 29. Accordingly, Appellant respectfully requests that the Board reverse the rejection of claims 28-29 under 35 U.S.C. §103(a).

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Respectfully submitted,

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### VIII. Claims Appendix

1. A method for displaying a TV program to a viewer, comprising:

receiving a plurality of TV programs, wherein at least some of the received TV programs compete with at least some others of the received TV programs for viewership;

allowing the viewer to select one of the plurality of received TV programs for viewing;

storing data indicative of the viewer selected TV program and data indicative of at least some others of the TV programs competing with the viewer selected TV program that were not selected;

determining viewing preferences using the stored data indicative of the user selected TV program and data indicative of at least some others of the TV programs competing with the viewer selected TV program that were not selected as well as one or more known program traits and one or more associated program traits, the associated program traits being combined with other known program traits so as to generate new program traits representative of said viewer's degree of preference of a program according to a regression analysis of the viewing habits of the particular viewer over time; and

controlling the programming displayed to the viewer in accordance with the viewer selection and the determined viewing preferences.

- 2. The method of claim 1, wherein controlling the programming displayed to the viewer comprises: displaying the viewer selected program and additional programs selected in accordance with the determined viewing preferences.
- 3. The method of claim 2, wherein the displaying additional programs comprises: displaying one or more advertisements.
- 4. The method of claim 3, further comprising: receiving a plurality of additional programs.

- 5. The method of claim 4, wherein controlling the programming displayed to the viewer further comprises: selecting one or more of the received additional programs in accordance with the determined viewing preferences for display to the viewer.
- 6. The method of claim 4, wherein receiving the plurality of TV programs and additional program comprises: receiving the plurality of programs through one or more broadcast televisions signals, cable television networks, computer networks, or telephone networks.
- 7. The method of claim 6, wherein receiving the plurality of TV programs and additional programs comprises: receiving the additional programs independently of the TV programs.
- 8. The method of claim 7, wherein receiving the plurality of TV programs and additional programs comprises: receiving the plurality of TV programs on a first set of TV channels; and receiving the plurality of additional programs on a second set of TV channels.
- 9. The method of claim 6, wherein receiving the plurality of TV programs and additional programs comprises: receiving the additional programs multiplexed with one or more of the TV programs.
- 10. The method of claim 4, further comprising: storing the received additional programs for subsequent display to the viewer.
- 11. The method of claim 10, wherein controlling the programming displayed to the viewer comprises: displaying the viewer selected program and additional programs selected in accordance with the previously determined viewing preferences of the viewer from among the stored additional programs.

- 12. The method of claim 4, wherein receiving the plurality of additional programs comprises: receiving a plurality of additional programs including targeting parameters related to the previously determined viewing preferences of the viewer.
- 13. The method of claim 12, wherein the targeting parameters include one or more of TV viewing preferences, demographic information, and additional program display schedule information.
  - 14. A method for displaying a TV program to a viewer, comprising:

transmitting a plurality of TV programs for selection therebetween by the viewer, wherein at least some of the TV programs compete with at least some others of the TV programs for viewership;

transmitting a plurality of additional programs;

storing data indicative of viewer selected ones of the TV programs and at least some others of the TV programs competing with the viewer selected TV programs that were not selected:

determining viewing preferences using the stored data indicative of the user selected TV program and stored data indicative of at least some others of the TV programs competing with the viewer selected TV programs that were not selected as well as one or more known program traits and one or more associated program traits; the associated program traits being combined with other known program traits so as to generate new program traits representative of said viewer's degree of preference of a program according to a regression analysis of the viewing habits of the particular viewer over time;

selecting ones of the additional programs in accordance with the determined viewing preferences for display to the viewer with the selected TV programs.

15. The method of claim 14, wherein transmitting the plurality of additional programs comprises: transmitting the plurality of additional programs independently of the TV programs.

- 16. The method of claim 14, wherein transmitting the plurality of additional programs comprises: transmitting a plurality of advertisements.
- 17. The method of claim 14, wherein transmitting the plurality of TV programs and additional programs comprises: transmitting the plurality of TV and additional programs through one or more broadcast television signals, cable television networks, computer networks, or telephone networks.
- 18. The method of claim 17, wherein transmitting the plurality of TV programs and additional programs comprises: transmitting the additional programs independently of the TV programs.
- 19. The method of claim 18, wherein transmitting the plurality of TV programs and additional programs comprises: transmitting the plurality of TV programs on a first set of TV channels; and transmitting the plurality of additional programs on a second set of TV channels.
- 20. The method of claim 17, wherein transmitting the plurality of TV programs and additional programs comprises: transmitting the additional programs multiplexed with one or more of the TV programs.
- 22. The method of claim 14, wherein transmitting the plurality of additional programs comprises: transmitting a plurality of additional programs including targeting parameters related to the viewing preferences of the viewer.
- 23. The method of claim 22, wherein the targeting parameters include one or more of demographic information and additional program display schedule information.
- 26. The method of claim 1, wherein performing said regression analysis results in the introduction of one or more additional traits used to improve the determination of the viewer's preference when an average error value between the selected program

and one or predicted programs determined in the regression process does not converge to a given value.

- 27. The method of claim 14, wherein performing said regression analysis results in the introduction of one or more additional traits used to improve the determination of the viewer's preference when an average error value between the selected program and one or predicted programs determined in the regression process does not converge to a given value.
  - 28. A method for displaying a TV program to a plurality of viewers, comprising:

receiving a plurality of TV programs, wherein at least some of the received TV programs compete with at least some others of the received TV programs for viewership;

allowing a viewer to select one of the plurality of received TV programs for viewing;

identifying whether a viewer profile has been created for said viewer;

creating said viewer profile if said viewer profile has not been created for said viewer:

storing in said viewer profile data indicative of said viewer selected TV program and data indicative of at least some others of the TV programs competing with the viewer selected TV program that were not selected;

determining viewing preferences from said viewer profile using the stored data indicative of said viewer selected TV program and data indicative of at least some others of the TV programs competing with the first viewer selected TV program that were not selected as well as one or more known program traits and one or more associated program traits; the associated program traits being combined with other known program traits so as to generate new program traits representative of said viewer's degree of preference of a program according to a regression analysis of the viewing habits of the particular viewer over time;

controlling the programming displayed to said viewer in accordance with the viewer selection and the determined viewing preferences.

29. The method of claim 28, wherein the identifying whether a viewer profile has been created for said viewer comprises: comparing said stored data indicative of said viewer selected TV program and data indicative of at least some others of the TV programs competing with the viewer selected TV program that were not selected with the profiles created for said plurality of viewers.

# IX. Evidence Appendix

None.

Χ.	Related	<b>Proceedings</b>	<b>Appendix</b>

None.